UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF MAILCODE:
WU-16J

DEC 30 2015

CERTIFIED MAIL 7014 2870 0001 9579 9663
RETURN RECEIPT REQUESTED

Mr. Steve Kniss
SWD Specialties, LLC
3947 US 131 North
Post Office Box 1030
Kalkaska, Michigan 49646

Re: Permit Compliance Evaluation Inspections of the Hogerheide #1-29 SWD, the Wlosinski #2-27, and the Simpson #1-9, Kalkaska County, Michigan; U. S. Environmental Protection Agency Permit Numbers MI-079-2D-C001, MI-079-2D-C016, and MI-079-2D-C008; Michigan Department of Environmental Quality Permit Numbers MIS-38125, MIS-36963, and MIS-32660

Dear Mr. Kniss:

On September 25, 2014, EPA representatives inspected the facilities listed above. The purpose was to evaluate compliance with the EPA permits referenced above as well as the Safe Drinking Water Act, and the requirements of the Underground Injection Control Program as codified in Title 40 of the Code of Federal Regulations Parts 144 and 146. Enclosed please find a copy of our inspection report.

If you have any questions about the contents of this letter or the inspection report, please feel free to contact Tim Elkins of my staff at (312) 886-0263 or by email to elkins.timothy@epa.gov.

Sincerely,

Stephen M. Jann, Chief
Underground Injection Control Branch

Enclosures

cc w/enclosures (via email):

Joe Pettit, MDEQ
Larry Organek, MDEQ

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:
WU-16J

UNDERGROUND INJECTION CONTROL
INSPECTION REPORT

Purpose:	Permit Compliance Evaluation
Facility:	SWD Specialties, LLC of Kalkaska, Michigan; Hogerheide #1-29 SWD, Wlosinski #2-27 SWD, and Simpson #1-9
EPA UIC Permit Number(s):	MI-079-2D-C001 MI-079-2D-C016, and MI-079-2D-C008
State Permit Number(s):	MIS-38125 MIS-36963 MIS-32660
Date(s) of Inspection:	September 25, 2014
EPA Representative(s):	Tim Elkins, Enforcement Officer, (312) 886-0263, elkins.timothy@epa.gov Jeff McDonald, Geologist, (312) 353-6288, mcdonald.jeffrey@epa.gov Anna Miller, Scientist, (312) 886-7060, miller.anna@epa.gov Jeff Wawczak, Inspector, (312) 886-1988, wawczak.jeffrey@epa.gov
State Representative(s):	None
Facility Representative(s):	Steve Kniss, (231) 258-9961, skniss@northernal.com
Report Prepared by:	Tim Elkins, Enforcement Officer/ Environmental Scientist
Inspector Signatures:	12/22/15 12/22/15 12/22/15 12/22/15

BACKGROUND

The purpose of this report is to document EPA's evaluation of SWD Specialties, LLC for compliance with the EPA permitted conditions and the Underground Injection Control (UIC) provisions of the Safe Drinking Water Act (SDWA) at its Class II injection well facilities in Kalkaska County, Michigan. SWD Specialties, LLC (or "SWD" or "the Company") is a subsidiary of Northern A-1 Services and American Waste. SWD operates three commercial Class II injection wells in Kalkaska County; the Hogerheide #1-29 SWD (EPA #MI-079-2D-C001), the Wlosinski #2-27 (EPA #MI-079-2D-C016), and the Simpson #1-9 (EPA #MI-079-2D-C008). EPA's authority to enter and inspect SWD's facilities is expressed in Part I (E)(7) Inspection and Entry of the EPA permits referenced above. The underground injection of Class II fluids (e.g. produced brine or saltwater) is regulated by EPA in Michigan.

SWD is authorized to use its Class II injection wells in Kalkaska County for the commercial disposal of fluids related to the production of oil and gas, and oilfield contaminated groundwater, as approved by the Director. Presently there are a total of 463 approved sources of oil field brine authorized for disposed into each of SWD's individual injection wells in Kalkaska County. Each individual source is identified by field name, specific location (i.e. "township, range, and section" or "Rectangular Survey System" location) and formation names. All EPA approved sources are listed in Part III (D) of SWD's permits, and complete chemical analysis of each approved source of brine that makes up the injection fluid is included in the permit file.

Reporting requirements are detailed in Part II (B)(3)(a) Monthly Reports of the permits, which state that monthly reports shall include the "weekly measurements" of injection pressure, annulus pressure, flow rate, and cumulative volume as required in Parts II (B)(2)(d) and III (A) of the permit. Operating, monitoring, and reporting frequencies are outlined in Part III (A) of SWD's permits. The EPA permits for SWD's injection wells limit injection to depth intervals that include a combination of the Lower Antrim, Bell Shale, Traverse, Dundee, and Reed City formations. EPA previously witnessed mechanical integrity tests of the injection wells conducted by the SWD, but had not conducted permit compliance evaluations of the facilities since SWD was authorized to commercially operate the wells.

SITE INSPECTION

Entrance and Briefing

On September 25, 2014, EPA Representatives Tim Elkins, Jeff McDonald, Anna Miller, and Jeffrey Wawczak, arrived at SWD's Hogerheide #1-29 SWD facility at 9:00 am (Eastern). EPA Inspectors met with Steve Kniss, facility representative for SWD. Mr. Elkins explained that the purpose of the inspection was to make observations and evaluate compliance with each facility's EPA regulated operations. Mr. Wawczak, Mr. Elkins, and Mr. McDonald presented their EPA Inspector Credentials, and Ms. Miller provided her federal identification for Mr. Kniss. Mr. Wawczak served a notice of inspection (Attachment A). Mr. Kniss signed the notice of inspection as the "Facility Representative" and Mr. Wawczak signed as the EPA "Inspector."

Mr. Elkins discussed safety requirements and requested permission to take photographs during inspection. Mr. Kniss did not object to any photographs being taken during EPA's inspection, and no additional safety measures were required by SWD. Mr. Elkins also explained EPA's "Small Business" definition, and provided the U.S. EPA Small Business Resource Information Sheet[1]

[1] EPA Site: U.S. EPA Small Business resources Information Sheet (http://www2.epa.gov/sites/production/files/2015-

and Questions & Answers on EPA's Small Business Compliance Policy[2] to ensure the inspection was conducted in accordance with the Small Business Regulatory Enforcement Fairness Act (SBREFA) and the Agency's Small Business Compliance Policy.

Process Description
Tanker trucks transport waste fluids generated in the production of oil and gas exploration to SWD's injection well facilities, and off-load at stations consisting of a concrete pad and a trap for catching potential spills. Class II fluids are stored in brine holding tanks prior to injection. All off-loaded fluid first passes through filter canisters to remove solids before entering the tanks for storage. All transport trucks that enter SWD's well facilities are owned and operated by SWD or its parent company (i.e. Northern A-1). At each facility, fluid is pumped from the brine tanks through aboveground steel piping to the wellheads for injection.

Mr. Kniss specified SWD has both verbal and written agreements with other companies for the disposal of waste fluids. Currently, SWD accepts oilfield brine and Class II fluids from hydraulic fracturing stimulations, including production projects owned or operated by Encana (now owned by Marathon) and Chevron. Mr. Kniss indicated that all of SWD's drivers and pumpers are trained and are knowledgeable about the requirements to report any losses of mechanical integrity, and the Company has a procedure in place for requesting EPA approval for new injection fluid sources.

1. Hogerheide #1-29 SWD (EPA #MI-079-2D-C001)

Areas Inspected
The Hogerheide #1-29 SWD facility entrance is located on the west side of M-66 Highway, in Kalkaska County. The facility is fenced and gated. Mr. Kniss indicated it is typically locked and all of the facility's truck drivers have a combination to the lock, and the Company has plans to upgrade site security and install cameras. The well pad consists of a sand base, and is completely surrounded by perimeter fencing. The wellhead is covered by a small steel enclosure building. Gages are present on the tubing and annulus, and appeared to be in good working condition (Attachment B, Figures 1 and 3). EPA observed 280 pounds per square inch gaged (psig) on the tubing, and 68 psig on the annulus. Staff at the facility monitor injection and annulus pressure by manually recording gage pressures. The annulus to the well is closed, and liquid loss is monitored on a quarterly basis. A sign identifying the well was mounted on a steel post; leaning on piping next to the well enclosure building (Attachment B, Figure 2).

All injection into the well takes place with the use of a pump, and a Murphy Pressure Swichgage (mechanical gage instrument) starts or stops injection, and limits the injection pressure at which the well can operate. Mr. Kniss stated SWD typically sets its Murphy Switchgages 10 – 20 psig below the EPA permitted maximum injection pressure (MIP). The permitted MIP is limited to 399 psig at the surface of the Hogerheide #1-29 SWD. EPA observed 300 – 310 psig on the Murphy Swichgage located in the pump house for the Hogerheide #1-29 SWD well (Attachment B, Figures 4 and 5). Both the Murphy Swichgage and a "tank overflow alarm" act as an automatic shut-off system at the facility. Mr. Kniss stated that the volume of fluid injected and flow rate are based on the fluid level in the facility's brine tanks and the fluid drawdown. Two lined secondary containment areas each house six 400 bbl brine tanks (12 total). All piping from the brine tanks to the injection well was in good condition; no signs of leaks were present (Attachment B, Figure 9).

The Hogerheide #1-29 SWD facility load/off-load station consists of a concrete pad, several flow

05/documents/smallbusinessinfo.pdf)

[2] EPA Site: Frequent Questions for Small Entities (http://www2.epa.gov/reg-flex/frequent-questions-small-entities)

lines, filter canisters to remove solids, and a vaulted trap to catch spills. (Attachment B, Figures 6 – 7, 10). Grease and oil residue are present on flow line hoses and filter canisters. All solids recovered in the on-site traps and filter cartridges are landfilled by the Company. A sign posting operating procedures for unloading and loading fluid at the facility, including emergency contact information, is posted on the pump house at the load station (Attachment B, Figure 8).

Inspector McDonald departed from the group, and the remaining EPA inspectors followed Mr. Kniss' vehicle to the Wlosinski #2-27 injection well facility at 10:30 am (Eastern).

2. Wlosinski #2-27 (EPA #MI-079-2D-C016)

Areas Inspected

The Wlosinski #2-27 facility is located on the south side of Wood Road NE, in Kalkaska County. The facility is approximately six acres in area with the perimeter completely surrounded by a fence. Mr. Kniss stated the entrance gate is typically locked. The site consists of a mostly sand well pad, injection wellhead, pump house, and tank battery. The wellhead and pad appeared in good condition, and no signs of spills or leaks were observed.

Gages are present on the tubing and annulus, and appeared to be in good working condition (Attachment B, Figures 11 - 13). EPA observed 350 psig on the tubing, and 2 psig on the annulus while the well was injecting. The EPA permitted MIP of the Wlosinski #2-27 well is limited to 503 psig at the surface. Injection and annulus pressures at the well are manually recorded by SWD staff. The annulus is closed, and liquid loss is monitored on a quarterly basis. The annulus is filled with brine and corrosive inhibitor. A sign identifying the well is posted at the wellhead (Attachment B, Figure 11).

Three Murphy Pressure Swichgages are used to start/stop and limit injection pressure at the Wlosinski #2-27 facility (e.g. Attachment B, Figures 14 and 15). Mr. Kniss stated that the volume of fluid injected and flow rate are based on the fluid level in the facility's brine tanks. The tank battery is completely within a lined secondary containment/berm area. Seven 400 bbl brine tanks are used to store injection fluid (Attachment B, Figure 16). Aboveground steel piping was recently painted and is supported by steel stands. All piping appeared in good condition; no signs of leaks were present (Attachment B, Figure 9). EPA inspectors followed Mr. Kniss' vehicle to the Simpson #1-9 injection well facility at 11:00 am (Eastern).

3. Simpson #1-9 (EPA #MI-079-2D-C008)

Areas Inspected

The entrance to the Simpson #1-9 facility is located on the east side of Smith Road NW, in Kalkaska County. The facility entrance is gated, but the perimeter is not fenced. The surrounding area is densely forested by deciduous trees. A gravel access road leads approximately 350 feet east through the wooded area, into a clearing where the wellhead and tank battery are sited.
Part II (A)(5) Site Security of the Simpson #1-9 permit requires the operator to construct a fence with a padlocked gate around the facility to preclude access of unauthorized personnel and prevent illegal dumping into the injection well.

The well pad consists of a sand base, wellhead, pump house, tank battery, and load/off-load station. A sign identifying the well is posted next to the pump house and wellhead (Attachment B, Figures 17 and 24). Gages are present on the tubing and annulus, and appeared to be in good working condition (Attachment B, Figures 18 - 21). EPA observed 30 psig on the tubing, and 1 - 2 psig on the annulus. The annulus to the well is closed, and liquid loss is monitored on a quarterly

basis. Mr. Kniss indicated samples for chemical analyses (i.e. brine analyses) are either pulled from the "downhole" tank or from the in-line port in the pump house.

A Murphy Pressure Swichgage controls injection pressure at the site, and a Kimray liquid level control valve, or "dump valve" opens when fluid in the storage tank rises above a set level. These control devices are common in salt water disposal systems. MIP is limited to 298 psig at the Simpson #1-9. EPA observed 0 psig on the Murphy Swichgage located in the pump house while the well was not injecting; the mechanical gage is set to shut down at approximately 275 psig (Attachment B, Figure 23). Mr. Kniss stated that the volume of fluid injected and flow rate are based on the fluid level in the facility's brine tanks, and all injection and annulus pressure are monitored manually from the facility's mechanical gages.

Above ground piping from the pump house to the well head is supported by cinderblocks (Attachment B, Figure 24). The tank battery and "clay lined" secondary containment area house six 400 bbl brine tanks. All injection fluid flows through aboveground steel piping brine to the injection well. All piping to the injection well was in good condition, and no signs of leaks were present (Attachment B, Figures 22, 24 - 25). The earthen berm or clay lined containment area appeared freshly shaped, and no sign of spills were present. The load station consists of a concrete pad, several flow lines, filter canisters to remove solids, and a vaulted trap to catch spill. Stains, oil residue, or other residual fluids appeared to be limited to the concrete pad at the load station.

Exit Briefing

After inspecting the Simpson #1-9 facility, Mr. Elkins stated that an inspection report would be mailed to SWD upon completion of EPA's evaluation and record review, and copies of photographs taken during the inspection would be provided. EPA indicated that the facilities inspected appeared to be well maintained. EPA staff cleared the site at 11:30 am (Eastern).

Document Review

Monitoring reports and brine manifests records for SWD's injection wells are stored at the Company's main office in Kalkaska, Michigan. No records were reviewed in the field during EPA's inspection. However, at EPA's request Mr. Kniss brought copies of the Company's monitoring reports and brine manifests to the inspection. EPA requested at least five months of monitoring reports and two months of brine manifests for each well inspected (randomly selected by EPA). After the inspection, Mr. Elkins reviewed all monthly reports and manifests provided by the Company for the Hogerheide #1-29 SWD, Wlosinski #2-27, and Simpson #1-9 wells. Brine manifest records must be submitted quarterly and must be either a copy of the State Report for commercial haulers or the permittee's records of deliveries by the various haulers. These records must include the following information: (1) name, address and phone number of the waste generator (producer), and name(s) and EPA ID number(s) of the waste hauler(s); (2) the date(s) brine was unloaded at the disposal site and the volume of each load with the source identification number as shown in Part III (D) of the permit.

Hogerheide #1-29 SWD

EPA reviewed monthly monitoring reports for November 2012, December 2012, June 2013, May 2013, and April 2014 for the Hogerheide #1-29 SWD. EPA found the monthly maximum injection pressures and annulus pressures reported to be in accordance with EPA permitted limits. All annulus pressure measurements were consistently reported as 0 psig on all monthly reports.

EPA reviewed brine manifests for fluids hauled to the injection well in June and July 2014. The manifest records include the information required by the permit, and referenced above. Based on

the information provided on the manifests, EPA was able to confirm all but one sources injected into the Hogerheide #1-29 SWD well were approved as described in the EPA permit in Part III (D) List of Presently Approved Sources. One unconfirmed source (Manifest Tracking #007111768) was described as waste code 299 (i.e. source 299 in the EPA permit) from Tiger Development, LLC's "State Garfield and Tiger 1-14." A hand written correction on the manifest appeared to change the source description from the "4-14" to the "1-14". Waste source number 299 in the EPA permit is approved for fluids from the Amherstburg formation in Section 14 of Township 25N, Range 6W. However, based on the well report summary and drilling records on the State of Michigan's and MDEQ's GeoWebFace database[3], the State Garfield and Tiger 1-14 (MDEQ permit #54696) is completed and producing from St. Peter formation and Prairie du Chien Group, not the Amherstburg.

Wlosinski #2-27

EPA reviewed monthly monitoring reports for October 2012, November 2012, April 2013, July 2013, January 2014, and February 2014 for the Wlosinski #2-27. EPA found the monthly maximum injection pressures and annulus pressures reported to be in compliance with EPA permit limits. However, monthly reports for October 2012, November 2012, and July 2013 included injection pressure reporting as "Vacuum". Injection pressure must be monitored at least once per week, and should be reported in units of psig or "Hg (inches of Mercury), rather than simply on vacuum. All annulus pressure measurements were consistently reported as 0 psig on each report.

In accordance with Part II (B)(2)(d) Monitoring Requirements of the permits, injection pressure, annulus pressure, flow rate and cumulative volume shall be recorded at least weekly and shall be reported monthly. All gauges used in monitoring shall be calibrated in accordance with Part I (E)(17)(e) of the permits. Reporting requirements detailed in Part II (B)(3)(a) Monthly Reports of the permits state that monthly reports shall include the "weekly measurements" of injection pressure, annulus pressure, flow rate, and cumulative volume as required in Parts II (B)(2)(d) and III (A) of the permits.

EPA reviewed brine manifests for fluids injected into the well in May and June 2014. Based on the information provided and described on the manifests, EPA was able to confirm all waste sources hauled to the Wlosinski #2-27 well were approved as described in the EPA permit.

Simpson #1-9

EPA reviewed monthly monitoring reports for June 2012, November 2012, December 2012, April 2013, July 2013, and May 2014 for the Simpson #1-9. EPA found the monthly maximum injection pressures and annulus pressures reported to be in compliance with EPA permit limits. However, monthly reports for November 2012, December 2012, and July 2013 included injection pressure reporting as "Vacuum". Injection pressure must be monitored at least once per week, and should be reported with units, rather than simply "on vacuum". All annulus pressure measurements were consistently reported as 0 psig.

EPA reviewed brine manifests for fluids injected into the well in February and March 2014. The manifest records include the information required by the permit. Based on the information provided on the manifests, EPA was able to confirm all but one sources injected into the Simpson #1-9 well were approved as described in the EPA permit. One unconfirmed source (Manifest Tracking #006680174) was described as waste code 121 (i.e. source 121 in the EPA permit) from Merit Energy's "Norwich." Waste source number 121 in the EPA permit is approved for fluids

[3] Michigan Department of Environmental Quality GeoWebFace Site (http://www.deq.state.mi.us/GeoWebFace/)

from the Niagaran formation in Section 13 of Township 1N, Range 3W. EPA was unable to locate a well report summary or drilling records on the State of Michigan's and MDEQ's GeoWebFace database, for the well described as "Norwich" in Section 13 of Township 1N, Range 3W.

SUMMARY

Mr. Kniss was very helpful and knowledgeable of all operational practices at the facility. MIT requirements for SWD's injection wells in Kalkaska County, MI are up to date, and monthly monitoring records reviewed after EPA's inspection were found to have been reported in accordance with EPA permit limits. EPA was able to confirm all but two waste sources hauled to the Company's injection wells were approved as described in the EPA permits.

To ensure the accuracy of annulus pressure monitoring and reporting, and maintain compliance with permitted conditions, EPA requires that annulus and injection pressures are physically monitored with a gage weekly and reported to EPA on a monthly basis (even if it consistently operates in a specific pressure range or operates on a vacuum). In accordance with Part II (B)(2)(d) Monitoring Requirements of the permits, injection pressure, annulus pressure, flow rate and cumulative volume shall be recorded at least weekly and shall be reported monthly. All gages used in monitoring shall be calibrated in accordance with Part I (E)(17)(e) of the permits. Reporting requirements detailed in Part II (B)(3)(a) Monthly Reports of the permits state that monthly reports shall include the "weekly measurements" of injection pressure, annulus pressure, flow rate, and cumulative volume as required in Parts II (B)(2)(d) and III (A) of the permits.

ATTACHMENTS

A) Notice of Inspection
B) Inspection Photo Log

Attachment A

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:
WU-16J

NOTICE OF INSPECTION

Underground Injection Control Program

Date: 9/25/2014 Time: 9:00 (AM)/PM

Facility to be Inspected:

MI-079-2D-C001 Hogerheide #1-29
MI-079-2D-C016 Wlosinski #2-27
MI-079-2D-C008 Simpson #1-9

Company Name & Address:

SWD Specialties
3947 US 131
N. Kalkaska Michigan 49646

Notice of Inspection is hereby given according to
Section 1445(b) of the Safe Drinking Water Act
(42 U.S.C § 300 (f) et seq.)*

Reason for Inspection:

For the purpose of inspecting records, files, papers, processes, controls and facilities, and /or obtaining samples to determine whether the person subject to an applicable underground injection control program has acted or is acting in compliance with the Safe Drinking Water (SDWA) and any applicable permit or rule.

*Sections 1445(b)(1) and (c) of the SDWA (42 U.S.C § 300 j-4(b)) are quoted on the back of this notice.

Received by: 9/25/14
(Facility Representative) (Date)

Inspector: 9/25/2014

Text of section 1445(b) (1) and (c) of the Safe Drinking Water Act:

(b)(1) Except as provided in paragraph (2), the Administrator, or representatives of the Administrator duly designated by him, upon presenting appropriate credentials and a written notice to any supplier of water or other person subject to

(A) a national primary drinking water regulation prescribed under Section 1412,

(B) an applicable underground injection control program, or

(C) any requirement to monitor an unregulated containment pursuant to subsection (a), or person in charge of any of the property of such supplier or other person referred to in clause (A), (B), or (C), is authorized to enter any establishment, facility, or other property of such supplier or other persons in order to determine whether such supplier or other person has acted or is acting in compliance with this title, including for this purpose, inspection at reasonable times, of records, files, papers, processes, controls, and facilities, or in order to test any feature of public water system, including its raw water source. The Administrator or the Comptroller General (or any representative designated, by either) shall have access for the purpose of audit and examination to any records , reports, or information of a grantee which are required to be maintained under subsection (a) or which are pertinent to any financial assistance under this title.

(c) Whoever fails or refuses to comply with any requirement of subsection (a) of this section or to allow the Administrator, the Comptroller General, or representatives of either, to enter and conduct any audit or inspection authorized by subsection (b) or this section shall be subject to a civil penalty or not to exceed $25,000.

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*Amendments to EPA's Civil Penalty Policies to Implement the 2008 Civil Monetary Penalty Inflation Adjustment Rule (Effective January 12, 2009)

Violations of the Safe Drinking Water Act and Underground Injection Control regulations are subject to Administrative Orders which may include penalties of up to $187,500, civil penalties of up to $37,500 per day of violation and criminal penalties of up to three years imprisonment and fines in accordance with Title 18 of the United States Code.

Attachment B

U.S. EPA PHOTO LOG

Facility: SWD Specialties, LLC

Well(s): Hogerheide #1-29 SWD
Wlosinski #2-27
Simpson #1-9

EPA Permits: MI-079-2D-C001
MI-079-2D-C016
MI-079-2D-C008

Inspector(s): Tim Elkins
Jeffrey McDonald
Anna Miller
Jeff Wawczak

Date: 9/25/14

Cameras: Olympus Stylus 850 SW (R5 WD EPA Camera #2) – IMG files
Canon PowerShot G12 (R5 WD EPA Camera#3) – P925 files

Files: JPEG images

1. P9250044
2. IMG_0261
3. IMG_0263
4. P9250045
5. P9250046
6. P9250047
7. IMG_0265
8. P9250048
9. P9250049
10. P9250051
11. IMG_0266
12. IMG_0267
13. IMG_0268
14. IMG_0272
15. IMG_0273
16. IMG_0275
17. IMG_0276
18. IMG_0277
19. IMG_0278
20. IMG_0279
21. IMG_0280
22. IMG_0281
23. IMG_0282
24. IMG_0285
25. IMG_0286

Figure 1: P9250044, 9/25/14, 9:25 am (Eastern), Hogerheide #1-29 SWD tubing gage (EPA observed 280 psig on gage while injecting), wellhead located in enclosure building, facing south/southwest.

Figure 2: IMG_0261, 9/25/14, 9:32 am (Eastern), Hogerheide #1-29 SWD well pad and sign, facing south.

Figure 3: IMG_0263, 9/25/14, 9:35 am (Eastern), Hogerheide #1-29 SWD annulus pressure gage (68 psig observed), facing south.

Figure 4: P9250045, 9/25/14, 9:32 am (Eastern), Hogerheide #1-29 SWD pump house, Murphy Pressure Swichgage (300 psig observed on gage), facing south/southwest.

Figure 5: P9250046, 9/25/14, 9:37 am (Eastern), Hogerheide #1-29 SWD pump house, pumps used for injection are activated/shut off by Murphy Pressure Swichgages, facing south.

Figure 6: P9250047, 9/25/14, 9:37 am (Eastern), Hogerheide #1-29 SWD offload station, in-line filter canisters and vaulted spill catch present, hoses and cement pad appeared oily, facing southwest.

Figure 7: IMG_0265, 9/25/14, 9:41 am (Eastern), Hogerheide #1-29 SWD offload station, in-line filter canisters, tank battery and secondary containment, facing south.

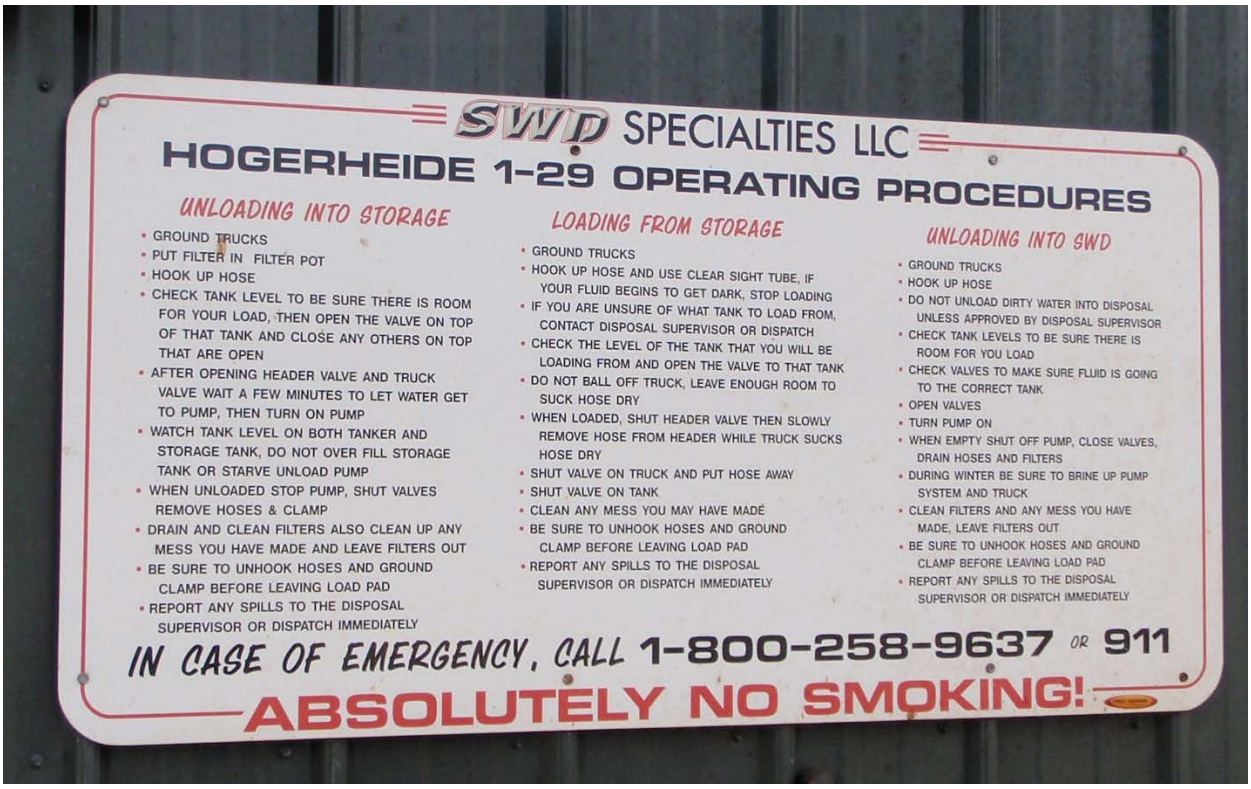

Figure 8: P9250048, 9/25/14, 9:41 am (Eastern), Hogerheide #1-29 SWD operation procedure sign posted at offload station and pump house, facing south.

Figure 9: P9250049, 9/25/14, 9:50 am (Eastern), Hogerheide #1-29 SWD aboveground piping, pump house, tank battery and secondary containment, facing southeast.

Figure 10: P9250051, 9/25/14, 9:50 am (Eastern), Hogerheide #1-29 SWD well enclosure building (left), and offload pad (right), facing west.

Figure 11: IMG_0266, 9/25/14, 10:37 am (Eastern), Wlosinski #2-27 wellhead and sign, small secondary containment area, gages present on tubing and annulus, facing south.

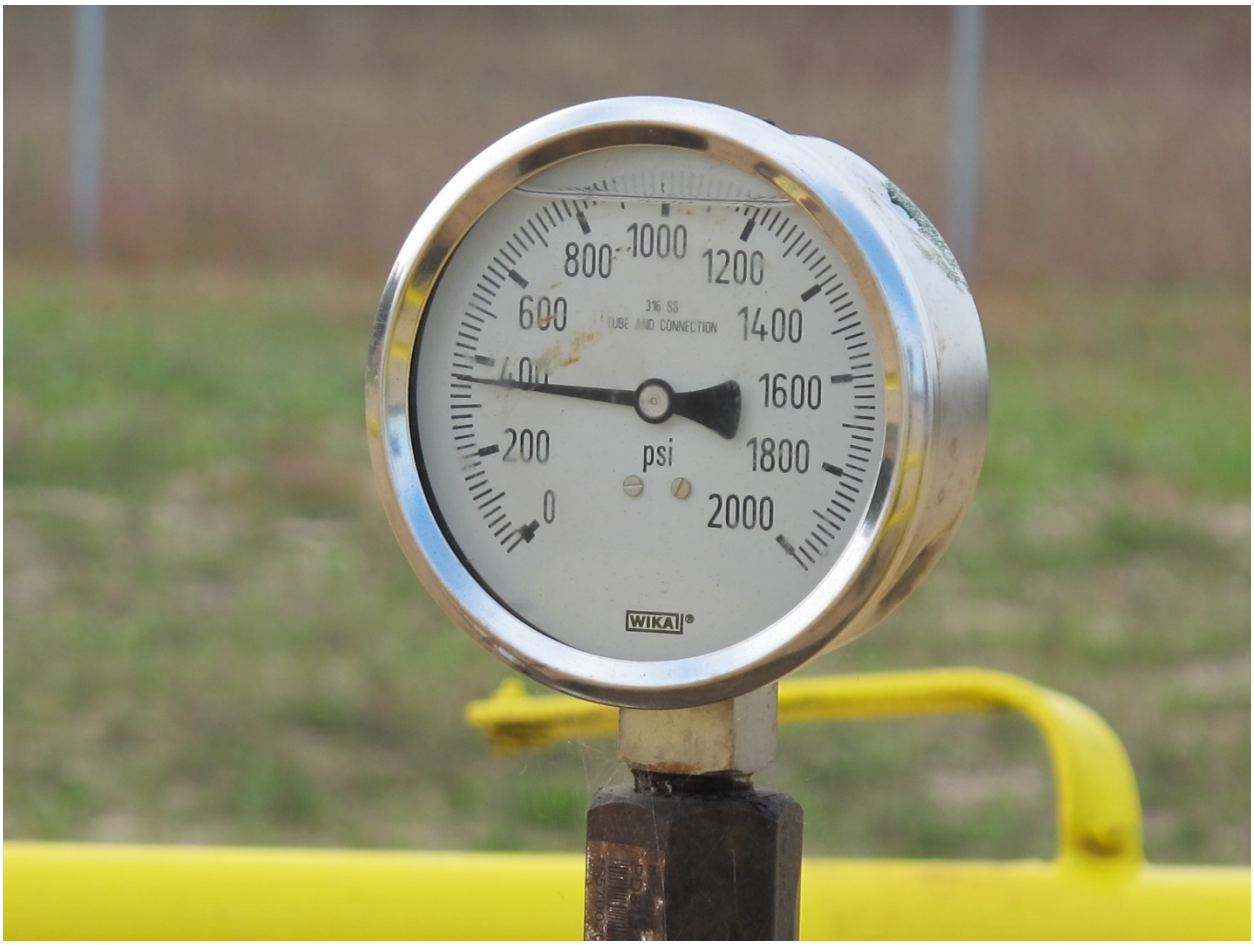

Figure 12: IMG_0267, 9/25/14, 10:38 am (Eastern), Wlosinski #2-27 tubing gage (350 psig observed on gage while injecting), facing south.

Figure 13: IMG_0268, 9/25/14, 10:38 am (Eastern), Wlosinski #2-27 wellhead and pad, no sign of spills or leaks were observed, tubing and annulus gages present and appeared in good working condition, facing south.

Figure 14: IMG_0272, 9/25/14, 10:45 am (Eastern), Wlosinski #2-27 pump house, Murphy Pressure Swichgage instrument (mechanical pressure gage) used to start and stop injection.

Figure 15: IMG_0273, 9/25/14, 10:46 am (Eastern), Wlosinski #2-27 pump house, Murphy Pressure Swichgage, filter canisters, and secondary containment catch present.

Figure 16: IMG_0275, 9/25/14, 10:49 am (Eastern), Wlosinski #2-27 tank battery and secondary containment area, well pad appeared in good condition, no signs of spills or leaks, EPA Inspector Tim Elkins (center) pictured observing site conditions, facing northeast.

Figure 17: IMG_0276, 9/25/14, 11:14 am (Eastern), Simpson #1-9 well sign posted at the facility pump house, facing north.

Figure 18: IMG_0277, 9/25/14, 11:14 am (Eastern), Simpson #1-9 wellhead, tank battery and secondary containment areas, EPA Inspector Tim Elkins observing tubing gage and well conditions, facing north.

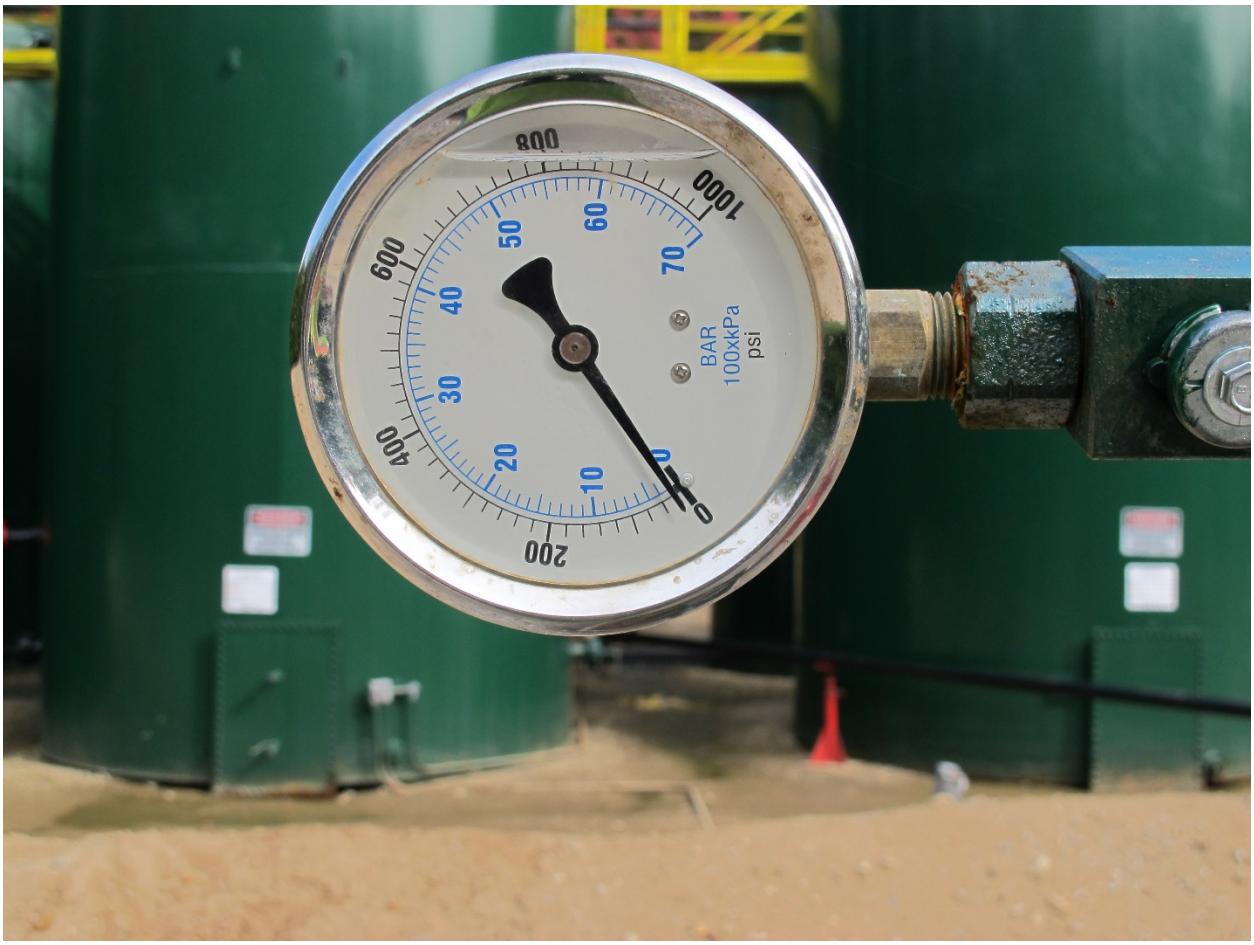

Figure 19: IMG_0278, 9/25/14, 11:15 am (Eastern), Simpson #1-9 tubing gage (30 psig observed on gage), gage appeared in good working condition, tank battery and secondary containment area, facing north.

Figure 20: IMG_0279, 9/25/14, 11:16 am (Eastern), Simpson #1-9 annulus gage (1 - 2 psig observed with valve open to gage), tank battery and secondary containment areas, facility representative pictured (right) opening the valve to the annulus gage, gage appeared in good working condition, facing north.

Figure 21: IMG_0280, 9/25/14, 11:16 am (Eastern), Simpson #1-9 wellhead and tank battery, well pad and secondary containment areas appeared in good condition, no signs of spills or leaks were present, facing northeast.

Figure 22: IMG_0281, 9/25/14, 11:17 am (Eastern), Simpson #1-9 well pad and tank battery, Kimray liquid level control valve (i.e. “dump” valves) pictured, equipment and secondary containment areas appeared in good condition, facing northwest.

Figure 23: IMG_0282, 9/25/14, 11:18 am (Eastern), Simpson #1-9 facility Murphy Swichgage instrument (mechanical pressure gage) used to start and stop injection, located within the facility pump house, 0 psig observed (well not injecting).

Figure 24: IMG_0285, 9/25/14, 11:23 am (Eastern), Simpson #1-9 facility, well sign posted at pump house, tank battery and secondary containment area, piping from tanks to pump house supported with cinder blocks, pad appeared clean with no signs of spills, facing north.

Figure 25: IMG_0286, 9/25/14, 11:23 am (Eastern), Simpson #1-9 facility tank battery and secondary containment, appeared clean with no signs of spills, facing west/northwest.